













































































































































**27.2.1.4** Galleys and other food preparation areas;

**27.2.1.5** Cabin and public toilet rooms; or

**27.2.1.6** Waste processing areas.

**27.2.2** Maintain negative air pressure, in relation to the surrounding areas, in the areas listed under Section 27.2.1.

**27.2.3** Provide a sufficient exhaust system in all food preparation, warewashing, cleaning rooms, and toilet rooms to keep them free of excessive heat, humidity, steam, condensation, vapors, obnoxious odors, and smoke.

**27.2.4** Provide all major air exhaust trunks with access panels to allow for periodic inspection and cleaning.

**27.2.5** Provide a written ventilation balancing report for those areas listed in Section 28.2.1.

## **28.0 Child Care and Child Activity Facilities**

**28.1** Include the following in child care and child activity facilities:

**28.1.1** Handwashing facilities that are accessible without barriers such as doors to each child activity and child care area. Teen areas are exempt from the handwashing facilities requirement.

**28.1.2** Toilet rooms in child care and child activity centers including:

**28.1.2.1** Child-size toilets;

**28.1.2.2** Handwashing facilities;

**28.1.2.3** A covered waste receptacle; and

**28.1.2.4** A sign advising users to wash their hands after using the toilet.

**28.2** Provide a diaper-changing station and disposal facilities in child care facilities. Include the following in each diaper changing station:

**28.2.1** A changing table designed for diaper changing that is impervious, non-absorbent, non-toxic, smooth, durable, and cleanable;

**28.2.2** An airtight, soiled-diaper receptacle;



**28.2.3** An adjacent handwashing station; and

**28.2.4** A sign advising child care facility staff to wash their hands after each diaper change.

**28.3** Provide separate toilet and handwashing facilities for child care providers.

## **29.0 Housekeeping**

**29.1** Provide handwashing stations for housekeeping staff. VSP will evaluate the number and location for these handwashing stations during the plan review process.

## **30.0 Public Toilet Rooms**

**30.1** Provide either of the following in the public toilet rooms:

**30.1.2** Hands-free exits from toilet rooms; or

**30.1.1** Paper towel dispensers with a waste receptacle near the exit door to allow towel disposal after opening the exit door(s).

## **31.0 Decorative Fountains**

**31.1** Provide potable water to all decorative fountains.

**31.2** Ensure that fountains are designed to be maintained free of algae and mold.

## **32.0 Acknowledgements**

### **32.1 Individuals**

This document is a result of the cooperative effort of many individuals from both the government and private industry, and the public. VSP staff thanks all of those who submitted comments and participated throughout this lengthy process.

## **32.2 Standards, Codes, and Other References Reviewed For Guidance**

**32.2.1** National Sanitation Foundation (NSF) International. 2005. Certification policies for food equipment and ANSI/NSF International Standards 2–59 for food equipment, through 2005. Ann Arbor, Michigan. For information, visit the NSF International Web site at URL: <http://www.nsf.org/>.

**32.2.2** Underwriters Laboratories (UL). 2005. Northbrook, Illinois. For information on UL standards, visit URL: <http://www.ul.com/clients/>.

**32.2.3** American National Standards Institute/National Spa & Pool Institute. 2004. Standard for public swimming pools and standard for public spas, standard 50: circulation system components and related materials for swimming pools, spas/hot tubs. NSF/ANSI 50-2004. Ann Arbor, Michigan. For more information, visit URL: <http://www.nsf.org/>.

**32.2.4** National Resource Center for Health and Safety in Child Care. 2002. Caring for our children: national health and safety performance standards: guidelines for out-of-home child care programs, second edition. Available through URL: <http://nrc.uchsc.edu/CFOC/>.

**32.2.5** Food and Drug Administration. 1997, 1999, and 2001. Food Code. Rockville, Maryland: US Department of Health and Human Services. Available through URL: <http://www.cfsan.fda.gov/~dms/foodcode.html>.

**32.2.6** International Code Council. 2003. International Electric Code. Falls Church, Virginia. For information, visit URL: <http://www.iccsafe.org/>.

**32.2.7** International Code Council. 2003. International Mechanical Code. Falls Church, Virginia. For information, visit URL: <http://www.iccsafe.org/>.

**32.2.8** International Code Council. 2003. International Plumbing Code. Falls Church, Virginia. For information, visit URL: <http://www.iccsafe.org/>.

**32.2.9** Plumbing-Heating-Cooling Contractors-National Association. 2003. National Standard Plumbing Code with illustrations. Falls Church, Virginia. Available through URL: <http://www.phccweb.org/>.

**32.2.10** International Association of Plumbing and Mechanical Officials. 2003. Uniform Plumbing Code. Uniform Plumbing Code-IAPMO/ANSI UPC 1-2003. Ontario, California. Available through URL: <http://publications.iapmo.org/>.

**32.2.11** Centers for Disease Control and Prevention. 2000. Vessel Sanitation Program operations manual 2000. Atlanta: US Department of Health and Human Services. Available at URL: <http://www.cdc.gov/nceh/vsp/manual/VSP%20Operations%20Manual%202000.pdf>.

**32.2.12** Centers for Disease Control and Prevention. 1997 March. Final recommendations to minimize transmission of Legionnaires' disease from whirlpool spas on cruise ships. Atlanta: US Department of Health and Human Services. (Available upon request from VSP).

**32.2.13** World Health Organization. 2004. Guidelines for drinking water quality, third edition. [http://www.who.int/water\\_sanitation\\_health/dwq/gdwq3/en/](http://www.who.int/water_sanitation_health/dwq/gdwq3/en/).

**32.2.14** World Health Organization. 1967. Guide to ship sanitation. The third revision of the guide was expected to be published in 2005. The draft was posted at URL: [http://www.who.int/water\\_sanitation\\_health/hygiene/ships/shipsanitation/en/](http://www.who.int/water_sanitation_health/hygiene/ships/shipsanitation/en/).

**32.2.15** US Consumer Product Safety Commission. 2005. Guidelines for entrapment hazards: making pools and spas safer 2005. Publication No. 363-009801. Available at URL: <http://www.cpsc.gov/cpscpub/pubs/363.pdf>.

**32.2.16** International Organization for Standardization. 2002. Ships and marine technology – identification colours for the content of piping systems, ISO 14726-2. Geneva, Switzerland. For information, see URL: <http://www.iso.org/iso/en/ISOOnline.frontpage>.

**32.2.17** International Maritime Organization. 2004. International Convention for the Safety of Life at Sea (SOLAS), 1974, as amended; consolidated edition. Summarized at URL: <http://www.imo.org/home.asp>.

## **33.0 Appendices**

### **33.1 Sample Letter of Request for Construction Inspection**

Chief, Vessel Sanitation Program  
National Center for Environmental Health  
Centers for Disease Control and Prevention (CDC)  
4770 Buford Highway, NE, F-23  
Atlanta, GA 30341-3724  
Facsimile (770) 488-4127

We request the presence of USPHS representatives to conduct a construction inspection on the cruise vessel (NAME). We tentatively expect to deliver the vessel on (DATE). We would like to schedule the inspection for (DATE). We expect the inspection to take approximately (NUMBER OF DAYS). We will pay CDC in accordance with the inspection fees published in the Federal Register. For inspections occurring outside of the United States, we will reimburse the Vessel Sanitation Program for all expenses in connection with the on-site Vessel Sanitation inspection and will make all necessary arrangements for lodging and transportation, which includes airfare and ground transportation in (CITY, STATE, COUNTRY). We will provide in-kind lodging, airfare, and local transportation expenses. We will reimburse the CDC for en-route per diem, meals and miscellaneous expenses, and ground transportation to and from the airport nearest the representative's work site or residence. No honorarium will be given. No U.S. federal funds will be used. Send an invoice to:

Company  
Attention:  
Street Address  
City, State, Country  
Zip Code  
Office Telephone Number  
Office Fax Number

If you have any questions concerning this request, please contact:

(Signed)  
Name and Title

Hotel  
Address  
Telephone Number

## **33.2 VSP Contact Information**

### **33.2.1 Atlanta Office**

Vessel Sanitation Program  
Centers for Disease Control and Prevention  
4770 Buford Highway, NE F-23  
Atlanta, GA 30341-3724  
Phone: (770) 488-7070  
Fax: (770) 488-4127  
E-mail: [vsp@cdc.gov](mailto:vsp@cdc.gov)

### **33.2.2 Fort Lauderdale Office**

Vessel Sanitation Program  
Centers for Disease Control and Prevention  
1850 Eller Drive, Suite 101  
Ft Lauderdale, FL 33316-4201  
Phone: 1-800-323-2132 or (954) 356-6650  
Fax: (954) 356-6671

### **33.2.3 VSP Website**

For updates to these guidelines and information about the Vessel Sanitation Program, visit <http://www.cdc.gov/nceh/vsp>.

## **33.3 VSP Construction Checklists and Vessel Profile Sheets**

**33.3.1** VSP developed checklists from these guidelines, which may be helpful to shipyard and cruise industry personnel in achieving compliance with these guidelines. You may obtain copies of these checklists from the VSP Website.

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